



February 12, 2010

Mr. Sam Chummar Work Assignment Manager U.S. Environmental Protection Agency (EPA) 77 West Jackson Boulevard (SR-6J). Chicago, IL 60604

Subject:

Oversight Summary for February 1 through February 5, 2010 (Week 4)

Plainwell Mill Site, Operable Unit No. 7 of

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site

Plainwell, Allegan County, Michigan

Remedial Action Contract (RAC) 2 No. EP-S5-06-02

Work Assignment No. 041-RSBD-059B

Dear Mr. Chummar:

SulTRAC has prepared the enclosed summary to document Phase II remedial investigation activities at the above-referenced site from February 1 through 5, 2010 (Week 4). Weyerhaeuser Company is the potentially responsible party for the site, and Conestoga-Rovers & Associates, Inc., (CRA), is its environmental contractor. Appendix A of this summary contains a photographic log of the investigation activities. Appendix B contains SulTRAC's field oversight notes. Appendix C contains SulTRAC's field sample log. Attachment 1 contains CRA's site maps with proposed sample locations.

If you have any questions about the enclosed summary, please call me at (312) 201-7491.

Sincerely,

Jeffrey J. Lifka

Aty of Tifes

Project Manager

Enclosure

cc: Norvelle Merrill-Crawford, EPA Contracting Officer (letter only)

Ron Riesing, SulTRAC Program Manager

File

#### **ENCLOSURE**

# OVERSIGHT SUMMARY FOR FEBRUARY 1 THROUGH FEBRUARY 5, 2010 (WEEK 4) PLAINWELL MILL SITE PLAINWELL, ALLEGAN COUNTY, MICHIGAN

(Nine Pages)

## OVERSIGHT SUMMARY FOR FEBRUARY 1 THROUGH FEBRUARY 5, 2010 (WEEK 4) PLAINWELL MILL SITE PLAINWELL, ALLEGAN COUNTY, MICHIGAN

**SulTRAC Oversight Personnel:** 

Kristi Root

**Reporting Period:** 

February 1 through 5, 2010 (Week 4)

#### INTRODUCTION

As requested by the U.S. Environmental Protection Agency (EPA) under contract number EP-S5-06-02 and work assignment number 041-RSBD-059B, SulTRAC conducted oversight and split sampling for Phase II of the Remedial Investigation (RI) for the Plainwell Mill Site, Operable Unit No.7 of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site in Plainwell, Michigan. Weyerhaeuser Company (Weyerhaeuser) is the potentially responsible party (PRP) for the site. Conestoga-Rovers & Associates, Inc. (CRA) is the environmental consultant to Weyerhaeuser.

As requested by EPA, SulTRAC began oversight activities at the site on January 11, 2010. This report summarizes SulTRAC's oversight activities and documentation of the PRP's Phase II activities during Week 4 of the RI from February 1 through 5, 2010; issues and developments that arose during the oversight activities; and future activities. Appendix A contains a photographic log of Week 4's site activities, including Photographs 1 through 5. Appendix B contains a copy of SulTRAC's field oversight notes. Appendix C contains SulTRAC's field sample log. Attachment 1 contains CRA's site maps with proposed sample locations.

#### **RI ACTIVITIES**

During the fourth week of RI oversight activities conducted from February 1 through 5, 2010, SulTRAC observed CRA collecting groundwater samples from 19 on-site monitoring wells. CRA maintained two field technicians on site (David Rivers and Corrie Bondy). Prein & Newhof, a survey company hired by CRA, was on site periodically to continue locating monitoring wells and staff gages, and to re-install and fix staff gages (SG-1 and SG-2).

During Week 4, CRA collected groundwater samples from 19 monitoring wells (MW-1 through MW-19). Samples collected by CRA and SulTRAC during Week 4 include: 19 groundwater samples (CRA) and five split samples (SulTRAC) plus one duplicate and one matrix spike/matrix spike duplicate (MS/MSD) (SulTRAC). Details for groundwater samples collected by CRA and SulTRAC are summarized in Appendix C. Sample locations are provided in CRA figures found in Attachment 1.

CRA collected groundwater samples from monitoring wells for analysis for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCB), metals (including low-level mercury and methyl mercury), and cyanide. SulTRAC collected groundwater samples from monitoring wells for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury), and cyanide. SulTRAC hand delivered groundwater samples to be analyzed for cyanide and metals (including low-level mercury) to its subcontractor laboratory, TriMatrix Laboratories, Inc., (TriMatrix) in Grand Rapids, Michigan. SulTRAC shipped all other split samples by overnight courier to an EPA Contract Laboratory Program (CLP) laboratory.

#### Monday, February 1, 2010

At 9:00 a.m., SulTRAC representative Kristi Root arrived on site. The weather was overcast, with temperatures in the low 20s degrees Fahrenheit (°F). CRA personnel on site included two field technicians (David Rivers and Corrie Bondy). The field project coordinator, Jodi Dembowske, was on site infrequently throughout the day. Prein & Newhof, a survey company hired by CRA, was on site periodically to locate monitoring wells and existing staff gages. CRA collected groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury and methyl mercury), and cyanide. SulTRAC collected split groundwater samples for analyses for VOCs, SVOCs, PCBs, metals

(including low-level mercury), and cyanide. Details involving sample identification numbers and sample collection times are provided in Appendix C.

At 9:35 a.m., CRA began setting up at MW-12. A special sampling procedure was required for low-level mercury. The sampling technique is called clean hands/dirty hands. Both CRA field technicians wore Tyvek suits; one technician was designated "Clean Hands" and one was designated "Dirty Hands." The "Clean Hands" handled all operations involving direct contact with the sample bottles and transfer of samples from the sample collection device to the sample bottles. "Dirty Hands" was responsible for all activities not involving direct contact with the samples. Tubing (for the low-flow sample pumping) and sample bottles were double-bagged. The CRA "Dirty Hands" field technician opened the first bag while the "Clean Hands" field technician (1) removed the inside bag containing the tubing or sample bottles (see Photograph No. 1 in Appendix A), (2) connected the tubing to the peristaltic pump, and (3) collected the groundwater samples for low-level mercury analysis. The groundwater samples were obtained using a peristaltic pump with the bottom of the tubing in the middle of the well screen. Each sampling interval was first purged until stable. A flow-through cell with a QED MP20 reader was used to determine when stabilization occurred. Water depths were measured throughout the sampling process to ensure no drawdown due to the pumping rate.

At 9:50 a.m., after CRA had set up at MW-12 and had begun the stabilization process, CRA moved to MW-13. CRA's "Clean Hands" field technician switched to a clean Tyvek suit and clean gloves before starting the setup process at MW-13. The same Clean Hands/Dirty Hands sampling procedures were repeated for collection of all groundwater samples.

At 10:20 a.m., MW-12 was stabilized after five water quality readings had been obtained. CRA collected one groundwater sample from MW-12 and a duplicate. SulTRAC did not collect a split sample from MW-12. After removing the inside bag containing the sample bottles, CRA's "Clean Hands" field technician collected samples for low-level mercury analysis (see Photograph No. 2 in Appendix A), and then returned the bottles and inner bag to the outside bag (see Photograph No. 3 in Appendix A). CRA's "Dirty Hands" field technician did not touch the inner bag or the low-level mercury sample bottles. Once the low-level mercury sample had been collected, either CRA field technician could continue the rest of the sampling. At 9:50 a.m., MW-13 stabilized after CRA had recorded four water quality measurements. CRA repeated the low-level mercury sampling procedures at MW-13 while 1-liter bottles were filling at MW-12. CRA collected one groundwater sample from MW-13, and SulTRAC collected a split sample. Sample collection ran concurrently at MW-12 and MW-13. Sample collection was completed at MW-12 at 12:00 p.m., and at MW-13 at 12:45 p.m.

At 12:15 p.m., CRA started setting up at MW-14 while sample collection continued at MW-13. Light snow flurries had begun to fall on the site and would increase in quantity throughout the day. MW-14 stabilized at 12:50 p.m. after four water quality measurements had been recorded by CRA. CRA completed collection of one sample at MW-14, including extra volume for an MS/MSD, at 2:15 p.m. SulTRAC did not collect a split sample at MW-14.

At 2:25 p.m., CRA began setting up at MW-11. At 3:05 p.m., MW-11 stabilized after three water quality readings had been collected. CRA collected one groundwater sample and SulTRAC collected one split sample from MW-11. Sample collection was completed at MW-11 at 4:20 p.m.

On Monday, February 1, 2010, CRA collected four groundwater samples, including additional volume for one MS/MSD, and an additional duplicate. SulTRAC collected two groundwater split samples. At 4:50 p.m., SulTRAC left the site to prepare the samples for delivery to its laboratories the following day, and CRA left the site to ship its samples by FedEx for overnight delivery to its laboratories.

#### Tuesday, February 2, 2010

At 8:00 a.m., SulTRAC representative Kristi Root arrived on site. The weather was overcast, 24 °F with snow flurries throughout the day and 2 to 3 inches of snow accumulation on site from overnight snowfall. CRA personnel on site included two field technicians (David Rivers and Corrie Bondy), and the field project coordinator (Jodi Dembowske) was on site infrequently throughout the day. Prein & Newhof was on site periodically to locate monitoring wells and existing staff gages and to fix SG-2. CRA collected groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury and methyl mercury), and cyanide. SulTRAC collected split groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury), and cyanide. Details involving sample identification and sample times are provided in Appendix C.

At 8:00 a.m., CRA began setting up at MW-3 using the "Clean Hands/Dirty Hands" sampling procedure. While MW-3 stabilized, CRA began setting up at MW-4. At 8:40 a.m., MW-3 stabilized after three water quality measurements and removal of approximately 2 gallons of groundwater. CRA collected one groundwater sample from MW-3 and an additional duplicate sample. SulTRAC did not collect a split sample from MW-3. At 9:20 a.m., MW-4 stabilized after four water quality measurements and removal of 1.8 gallons of groundwater. CRA collected one groundwater sample from MW-4. SulTRAC collected one groundwater split sample and a duplicate sample at MW-4.

At approximately 11:00 a.m., CRA began setting up at MW-5, which stabilized after four water quality measurements and removal of 1.5 gallons of groundwater. At 11:35 a.m., CRA collected one groundwater sample from MW-5. SulTRAC did not collect a split sample at this location.

At 12:40 p.m., CRA finished sampling MW-5 and moved to MW-10. MW-10 stabilized at 1:25 p.m. after four water quality measurements and removal of approximately 2.1 gallons of groundwater. CRA collected one groundwater sample from MW-10. SulTRAC did not collect a split sample from this location.

At approximately 2:40 p.m., CRA finished sampling MW-10 and started setting up at MW-9. MW-9 stabilized at 3:25 p.m. after 2.1 gallons of groundwater had been removed. CRA collected one groundwater sample from MW-9. SulTRAC did not collect a split sample from this location.

On Tuesday, February 2, 2010, CRA collected five groundwater samples and a duplicate sample. SulTRAC collected one groundwater split sample and one duplicate sample. At 4:30 p.m., SulTRAC departed the site to hand deliver samples to TriMatrix in Grand Rapids and also to ship samples overnight by FedEx to the CLP laboratory. CRA left the site to ship its samples by FedEx for overnight delivery to its laboratories.

#### Wednesday, February 3, 2010

At 8:00 a.m., SulTRAC representative Kristi Root arrived on site. The weather was overcast, 30 °F with 5 to 6 inches of snow accumulation on site from overnight snowfall. CRA personnel on site included two field technicians (David Rivers and Corrie Bondy), and the field project coordinator (Jodi Dembowske) was on site infrequently throughout the day. Prein & Newhof, was on site to re-install SG-1. CRA collected groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury and methyl mercury), and cyanide. SulTRAC collected split groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury), and cyanide. Details involving sample identification numbers and sample collection times are provided in Appendix C.

At 8:00 a.m., CRA began the sampling setup at MW-18 using the "Clean Hands/Dirty Hands" sampling procedure. While MW-18 stabilized, CRA set up at MW-6. At 8:40 a.m., MW-18 stabilized after three water quality readings and removal of approximately 2.1 gallons of groundwater. CRA collected one groundwater sample from MW-18. SulTRAC collect one groundwater split sample from MW-18 along with additional volume for MS/MSD analyses. At 9:10 a.m., MW-6 stabilized after four water quality

measurements and removal of 1.9 gallons of groundwater. CRA collected one groundwater sample and one duplicate sample from MW-6. SulTRAC did not collect a split sample from MW-6.

At 10:40 a.m., CRA finished sampling MW-6 and MW-18, and began setting up at MW-7. At 11:30 a.m., MW-7 stabilized after four water quality measurements and removal of 1.7 gallons of groundwater. CRA collected one groundwater sample from MW-7. SulTRAC did not collect a split sample at this location.

CRA finished sampling at MW-7 and began setting up at MW-19. MW-19 stabilized at 1:15 p.m. after three water quality measurements and removal of 1.6 gallons of groundwater. CRA collected one groundwater sample from MW-19 with additional volume for MS/MSD analyses. SulTRAC did not collect a split sample from this location.

At 2:40 p.m., CRA finished sampling at MW-19 and began setting up at MW-2. At 3:15 p.m., MW-2 stabilized after three water quality measurements and removal of 1.5 gallons of groundwater. CRA collected one groundwater sample from MW-2. SulTRAC did not collect a split sample at this location.

On Wednesday, February 3, 2010, CRA collected five groundwater samples, additional volume for MS/MSD analyses, and a duplicate sample. SulTRAC collected one groundwater split sample, plus extra volume for MS/MSD analyses. At 4:15 p.m., SulTRAC left the site to prepare the samples for delivery to its laboratories the following day, and CRA left the site to ship its samples by FedEx for overnight delivery to its laboratories.

#### Thursday, February 4, 2010

At 8:00 a.m., SulTRAC representative Kristi Root arrived on site. The weather was overcast and 13 °F. CRA personnel on site included three field technicians (David Rivers, Corrie Bondy, and John Valentine), and the field project coordinator (Jodi Dembowske) was on site infrequently throughout the day. John Valentine was on site today only to receive training on low-level mercury sampling. CRA collected groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury and methyl mercury), and cyanide. SulTRAC collected split groundwater samples for analyses for VOCs, SVOCs, PCBs, metals (including low-level mercury), and cyanide. Details involving sample identification numbers and sample collection times are provided in Appendix C.

At 8:00 a.m., CRA began setting up at MW-16 using the "Clean Hands/Dirty Hands" sampling procedure. Due to the cold weather conditions and storage of tubing in the unheated warehouse overnight, sediment froze in the tubing as CRA began pumping. This tubing was discarded and new tubing was installed.

Pumping continued as normal with the new tubing. At 8:45 a.m., MW-16 stabilized after three water quality measurements and removal of 1.7 gallons of groundwater. CRA collected one groundwater sample from MW-16, and SulTRAC collected one split sample. At 9:20 a.m., CRA began setting up at MW-17 while concurrently collecting samples at MW-16.

At 9:45 a.m., CRA finished collecting samples at MW-16, and MW-17 stabilized after four water quality measurements and removal of 2.3 gallons of groundwater. CRA collected one groundwater sample from MW-17 plus additional volume for MS/MSD analyses. SulTRAC did not collect a split sample from MW-17.

At 11:00 a.m., CRA finished sampling at MW-17 and began setting up at MW-1. At 11:40 a.m., MW-1 stabilized after four water quality measurements. CRA collected one groundwater sample from MW-1. SulTRAC did not collect a split sample at this location. Sampling from MW-1 was completed at 12:15 p.m.

At 1:00 p.m., CRA began setting up at MW-8. Once setup had been completed at MW-8, two of the CRA staff moved to MW-15. MW-8 stabilized at 1:45 p.m. after four water quality measurements, and MW-15 stabilized at 2:15 p.m. after three water quality measurements. CRA collected one groundwater sample from both MW-15 and MW-8. SulTRAC did not collect a split sample from either location.

CRA completed groundwater sampling on site at 2:40 p.m. On Thursday, February 4, 2010, CRA collected five groundwater samples plus additional volume for MS/MSD analyses. SulTRAC collected one groundwater split sample. At 3:15 p.m., CRA's John Valentine left the site to return all of the groundwater sampling equipment to CRA local office. The remaining CRA staff organized the remaining supplies. At 3:45 p.m., CRA and SulTRAC left the site. SulTRAC departed the site to hand deliver samples to TriMatrix in Grand Rapids and also to ship samples by FedEx for overnight delivery to the CLP laboratory. CRA left the site to ship its samples by FedEx for overnight delivery to its laboratories.

#### Friday, February 5, 2010

At 8:15 a.m., SulTRAC representative Kristi Root and CRA personnel David Rivers, Corrie Bondy, Jodi Dembowske, and Steve Coming arrived on site. The weather was overcast and 33 °F. SulTRAC and CRA personnel began loading vehicles with remaining supplies on site. At 9:00 a.m., CRA staff, Corrie Bondy and David Rivers, began obtaining depth-to-water measurements from all monitoring wells on site (see Photograph No. 4 in Appendix A) and the water elevations at the site's three staff gages (see Photograph No. 5 in Appendix A). Water depths were measured from the top of the monitoring well casing. Table 1

lists the water depths measured during the sampling process and the final water depths measured on Friday, February 5, 2010. At 10:10 a.m., the site was locked up after water depth measurements had been completed and Steve Coming had finished loading CRA's skid loader. CRA and SulTRAC left the site at 10:15 a.m.

**Table 1 Water Depth Measurements** 

Location ID	Date of Sampling	Water Depth Measured during Sampling (feet below top of casing)	Water Depth Measured on 2/5/2010 (feet below top of casing)
MW-1	2/4/2010	15.53	15.56
MW-2	2/3/2010	17.31	17.33
MW-3	2/2/2010	7.46	7.51
MW-4	2/2/2010	9.59	9.64
MW-5	2/2/2010	10.85	10.91
MW-6	2/3/2010	15.12	15.16
MW-7	2/3/2010	10.3	10.34
MW-8	2/4/2010	11.09	11.11
MW-9	2/2/2010	14.64	14.68
MW-10	2/2/2010	16.67	16.72
MW-11	2/1/2010	12.98	13.02
MW-12	2/1/2010	11.83	11.89
MW-13	2/1/2010	11.67	11.71
MW-14	2/1/2010	12.43	12.49
MW-15	2/4/2010	10.32	10.35
MW-16	2/4/2010	14.24	14.28
MW-17	2/4/2010	13.84	13.87
MW-18	2/3/2010	15.58	15.61
MW-19	2/3/2010	13.64	13.67

#### **ISSUES AND DEVELOPMENTS**

No issues or developments arose during oversight of Week 4 RI activities.

#### **FUTURE ACTIVITIES**

This week completed the Phase II RI site sampling activities as discussed in the work plan. Although CRA did not sample any on-site buildings during this past month of investigative activities, CRA is preparing an on-site building sampling plan for submittal to EPA. SulTRAC will review the plan and also oversee sampling of buildings in the near future as requested by EPA.

SulTRAC will also validate all sample analytical data received from TriMatrix for the Phase II RI sampling event. Also, EPA's Central Regional Laboratory will validate the CLP data for submittal to SulTRAC, and SulTRAC will evaluate these data as well. SulTRAC then will compare the split sample results to CRA's analytical data.

## APPENDIX A

## SULTRAC PHOTOGRAPHIC LOG

(Three Pages)



Photograph No. 1 Location: Plainwell Mill Site Orientation: North Date: February 1, 2010

Description: CRA's "Clean Hands" field technician removing inner bag containing low-level mercury sample container.



Photograph No. 2 Location: Plainwell Mill Site Orientation: North Date: February 1, 2010

Description: CRA's "Clean Hands" field technician collecting low-level mercury sample.



Photograph No. 3 Location: Plainwell Mill Site Orientation: West Date: February 1, 2010

Description: CRA's "Clean Hands" field technician returning sample bottle to bag while CRA's "Dirty Hands" field technician holds outside bag.



Photograph No. 4 Orientation: East

Description: CRA measuring water depth at MW-16.

Location: Plainwell Mill Site Date: February 5, 2010



Photograph No. 5 Orientation: Northeast

Location: Plainwell Mill Site Date: February 5, 2010

Description: CRA recording water elevation at staff gage-3 (SG-3).

## APPENDIX B

## SULTRAC OVERSIGHT FIELD NOTES

(Eight Sheets)



"Lite in the Rain" **ALL-WEATHER** FIELD No. 351

PLAINWELL MILL RI OVERSIGHT

1-11-2010 -->

Book 2

31 Plainwell Mill (New4) 02-01-10 0900 - CRA + SULTRAC STAFF onsily SulTRAC- K. ROOF CRA - Corrie Bondy + David River weather 22°f, overcast, nowind CRA has 19 GW samples to take this week 0935 - CRA both put tyrex for low level mercun sampling. Using clean hand durky hand method Corrie Bordy - clean hands MW-12- water level 11.83' drawdown only to 11.85 Started Purging well D. Rivers opened bag of tubing C. Bornely grabs tubing and lowered tubing into well and connect tubing to paristalic pump - water quality QED MP20 Clean hands removed tyrex suit and hands 0950 CRA storted setting upon MW13 while waiting fir mw-12 to stabling 0955 mw-13 bottom of well 18.83 water wel -11.67 Kush Ru 2-01-18

2-01-10 Plainwell Mill 1235-1250 Starbilized MW-14 1250 GW-56.394-CB-020110-200 MS/MS/ 1305 backnote took 3 readings to Stabilize but took 4" to be sure 1415- finished sampling -1425- Starte & MW-11 - E. Bondy clean hands D. Rivers dirry hands Water level 12.98 1430-snow-flurries increasing 1505 GW+56394-CB-020110-201 1505 5-GW-56394-CB-020110-201 8PLE 435/50 took 3 readings for stabilizers MW-11 1435-1508 - backnote 1620 - finished sampling MW-11 Daily summary --02-01-10-CRA: 4 samples - GW SUTRAC Z samples -6W 1650 = SuTRAC and CRA offsite Photo log Backnows -1318 - Photo log(E) clean hands mising LL HE WOAS 1517 - Photo log (E) clean hands mising LL HS@ mw-11 1516-Photo log(N) clean hands fremove from box Thurston 02-01-10

Plainwell Mill 02-01-10 1516 - Photo log (continued) dury hands holding outside bag . 1510 - Photo log (N) sampling LL Hg 1510 - Photo log (N) clean hands removing sample bottle from inner bag - MW-11 1432 Photo log-mw-11-bacteria cells sporadically in groundwater 1108 Photolog (W) clean hands returning sample bottles Ultz back in outside bag - MW-13 ku Pan O2 01-10

202-10 Plainwell Mill 0800 - Sultrac onsite CRA already onsite CRA Staff - C Bondy + D. Rivers - CRA started on MW-3 clean/dusty hand procedure to setup tubing GW-56394-CB-020110-ZOZ-CRA trop blanc 0825 CRA set up MW-4 while MW-3 Stubilizes 0840 mw-3 stabilized-3 readings to stabilize (29ats)-water Level 7.46 840 GW-56394-CB-020210-203 910 GW-SL394-CB-020210-204 Dup 0900 weather 24°F, overcast, snow flurnis, 2-3" accumilation over night 0965 mw-4- warer well 9.59 0920-mw-4 stabilized L-8 gals removed 4-reading-0920 - GW-56394-CB-020210-205 0920 - S-GW - S6394-CB-02020 - 205 splet 0950 - 80 - GW-SU394-CB-020210-205 dyo-Sulfrage 1000 - Pring Newhof onsite installing staff gage 1100 - CRA Start Stabilizing MW-5 1130-finished sampling mw-y-

Plainwell 2-3-10 0800 SUTRAC Onsite CRA already onsite weather 30°5 no snow 5-6" total accumilation overnight - CRA Setupon MW-18 Clean / hands dirty hands setup 0820 - CRA movedon to MW-6 while mw-1 stabilizes 0840. MW-18 stabilized (2/g) 3 readings MW-56394-03-020310-20 KR KR 0840 GW-56394-CB-020310-Z10 0840 S-GW-56394-08-020310-210 ms/msD 0910 -mW-6 stabilized 1.960 4 readings 1910 GW-56394-CB-020310-24 0940 GW-54394-CB-020310-212 days 1040 - Finished sampling MW-18 +mw-6 started stabilizing MW-7. 1130 MW-7 Aabilized (1.7 ga) 4 reading 1130 - GW-56394-CB-020310-213 1215 - finished sampling MW-7 1238 Photo log(s) mw-19 clean/hands/ dirty hands - removing tubing to sexp well 1240-Stated Stabolizing MW-19 Mar 203W

Plainwell Mill 02-04-10 0800 . Suttede onsity, CRA already Dresent, CRA STAFF, C. Benay a D. Rivers, SulTRACall week has been kroot only weather 13°F overcast no snow -0800 - Started on MW-16 0810 - 1st tubing down well pulled up sediment that frozein the tubing. Water depth is about 18's tubing already cold from being in warehouse overnight- used another tubine and started stabilizing proceding 0848 - MW-16 warer depth 17.93/341 secondary 1.750 purged - 3 readings 0845- GW-56394-CB-020410-217 0845 - S-GW-SL 394-CB-020410-217 Sp117 0800 - Backnote John Valenois from CPA also onsite - training 0920-CRA moved to MW-17 to start Stabilizing well while C. Bondy Sampled of MW-16 0256418

Plainwell Mill 02-04-10 1345 - MW-8 stabilized water depts @ 11.09' 4-readings 1345- GW-S6394-CB-020410-220 1405. MW-15 Stabilized woter depth @ 10.32' 3 readings 1405-GW-56394-CB-020410-221 1425- finish sampling mw-8-1440 - finish sampling mw-18 - Started packing up equipmen and samples -1515- D. Valentin (CRA) offsito to return ow sampling Equipment-Completed all GW sampling ONSIH 1545- SWITRACH CRA- Cleaning up Supplies /site + finished - SUITRAC TCRA Offsite 1550. SuITRAE to hotel to finish Duparing Sample for mp to Grand Rapids to trimatus Y ICLP via Fearex Summay CRA. 5 GW samples Suttrac - I GWSangy The Place 2-4-10

42 Planwell M	2.11 2-5-16
	CRA arme on ste
	inp supplies left at
the site -	
0900 - Started take	ng water level readings
MW-12 -	ke
LOCATION	WATER DEATH (Sept. to water)
mw-12	11.89
56-3	0.50 photo log (NE)
mw-13	11.71
MW-14	12.49
mw-u	13.62
mw-10	16.72
mw- 15	10.35
mw-8	11.11
mw - 7	10.34
mw-19	13.67
mw-5	10.91 KK 10.91
mw-y	9:64
St-2	3.32 photo (og (NE)
mw-3	7.51
mw-2	17.33
mw-I	15.86
mw-17	13.87
56-1 (new sta	offgage) 8.2 (s) photolog, (M
all mw levels tack	effgage) 8.2 (s) photology (N) ten from top of riser (N)

Planwell Mill		2-	5-10	)	
mw-16.	14.28	3' ph	ceto 1	05 (	(8)
mw-16. mw-18	15.61	1	(2p	note	(00
mw-6	15.16				
mw-9	4.68				
1000 - weather	ons	ite	· 33°	F	
overcast	-				
- CRA proje		dina	or J	local	
h	s bee	nor	Sit		
each more					00-
work -	1		7	Pm	
1010 - mw - deg	the tr	1120	ta		
Sampline CRA C. E					
-CRA Ste	D /200	ing f	mish	od	
loading	300	1000	C.L	unc	4
prepanin	2	s la	Class		
-CRA. D.	avar	3 10	aan	90	4
Site -	0 10	21 21	reit	,	
1015-SUTTRAC					
Backnote Photo	4			-	
8:57 - CRA sampli	ng 0	mw-	16 -		
7					
Ku	402			_	
	6	12	02-05	5-/1	)

## APPENDIX C

## FIELD SAMPLE LOG

(11 Pages)

SUBSURFACE SOIL SAMPLES										
		No. of the last of	The state of		SAMPLE	Field Duplicates	CRA sample	SulTRAC	SulTRAC Duplicate	SulTRAC
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	TIME	or MS/MSD	count	sample count	Count	MS/MSD count
FIELD BLANK	CRA	SO-56394-CB-011110-005	1/11/2010	429-1111		FB		100		
MW-14	CRA	S0-56394-CB-011210-006	1/12/2010	0-2	1010	MS/MSD	1			
MW-14	CRA	S0-56394-CB-011210-008	1/12/2010	8-10	1030		1			
MW-14	CRA	S0-56394-CB-011210-009	1/12/2010	8-10	1035	DUPLICATE				
MW-15	CRA	SO-56394-CB-011110-003	1/11/2010	0-2	1535		1			
MW-15	CRA	SO-56394-CB-011110-004	1/11/2010		1550		1			
MW-15	SulTRAC	S-SO-56394-CB-011110-003	1/11/2010	0-2	1535			1		
MW-16	CRA	S0-56394-CB-011210-015	1/12/2010	8-10	1600		1	- 42 - 2		
MW-16	CRA	S0-56394-CB-011210-016	1/12/2010	3-5	1550	77	1			
MW-16	CRA	S0-56394-CB-011210-017	1/12/2010	0-2	1540		1			
MW-16	SulTRAC	S-S0-56394-CB-011210-015	1/12/2010	8-10	1600			1		
MW-17	CRA	S0-56394-CB-011310-018	1/13/2010	0-2	1100		1			
MW-17	CRA	S0-56394-CB-011210-019	1/12/2010	8-10	1700		1			
MW-17	CRA	S0-56394-CB-011310-020	1/13/2010	0-2	1110	DUPLICATE				
MW-18	CRA	S0-56394-CB-011310-025	1/13/2010	0-2	1510		1			
MW-18	CRA	S0-56394-CB-011310-026	1/13/2010	8-10	1520		1			
MW-18	CRA	S0-56394-CB-011310-027	1/13/2010	10-12	1530		1			
MW-18	SulTRAC	S-S0-56394-CB-011310-026	1/13/2010	8-10	1520			1		
MW-19	CRA	S0-56394-CB-011310-028	1/13/2010	0-2	1630		1			
MW-19	CRA	S0-56394-CB-011310-029	1/13/2010	8-10	1640		1			
MW-19	SulTRAC	S-S0-56394-CB-011310-028	1/13/2010	0-2	1630			1		
SB-109	CRA	SO-56394-CB-011110-001	1/11/2010	0-2	1415		1			
SB-109	CRA	SO-56394-CB-011110-002	1/11/2010	8-10	1425		1			
SB-303	CRA	SO-56395-CB-011410-032	1/14/2010	0-2	900	MS/MSD	1			
SB-303	CRA	SO-56395-CB-011410-033	1/14/2010	3.5-5.5	905		1		Tar.	
SB-303	SulTRAC	S-SO-56395-CB-011410-033	1/14/2010	3.5-5.5	905			1		
SB-303	SulTRAC	SD-SO-56395-CB-011410-033	1/14/2010	3.5-5.5	907	DUPLICATE			1	
SB-303	CRA	SO-56395-CB-011410-034	1/14/2010	5.5-7.5	910		1			
SB-303	CRA	SO-56395-CB-011410-035	1/14/2010	8-10	915	1	1			
SB-303	CRA	SO-56395-CB-011410-036	1/14/2010	8-10	920	DUPLICATE				
SB-304	CRA	SO-56395-CB-011410-037	1/14/2010	0-2	1010		1			
SB-304	CRA	SO-56395-CB-011410-038	1/14/2010		1015		1			
SB-304	CRA	SO-56395-CB-011410-039	1/14/2010		1020		1			
SB-304	CRA	SO-56395-CB-011410-040	1/14/2010	8-10	1025	2	1			
SB-304	SulTRAC	S-SO-56395-CB-011410-040	1/14/2010		1025	State of the state of		1		
SB-305	CRA	SO-56395-CB-011410-041	1/14/2010	CONTRACTOR DESCRIPTION OF THE PERSON OF THE	1120		1			
SB-305	SulTRAC	S-SO-56395-CB-011410-041	1/14/2010			MS/MSD	777	1		1
SB-305	CRA	SO-56395-CB-011410-042	1/14/2010	COOKS THE CONTRACT OF THE PARTY	1130		1			

SUBSURFACE SOIL SAMPLES continued										
SAMPLE LOCATION	SÁMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample count	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD cour
SB-306	CRA	SO-56395-CB-011410-043	1/14/2010	0-1	1210		1			
SB-306	CRA	SO-56395-CB-011410-044	1/14/2010		1215		1	F . A # 11 L # 1	Service Control	WE THE S
SB-306	CRA	SO-56395-CB-011410-045	1/14/2010	7.5-9.5	1220	DUPLICATE	2 7/2/2			
SB-306	CRA	SO-56395-CB-011410-046	1/14/2010	9.5-11	1225		1			
SB-306	SulTRAC	S-SO-56395-CB-011410-046	1/14/2010	9.5-11	1225			1		
SB-307	CRA	SO-56395-CB-011410-047	1/14/2010	0-1	1400		1			
SB-307	CRA	SO-56395-CB-011410-048	1/14/2010	6-8	1405		1			
SB-307	CRA	SO-56395-CB-011410-049	1/14/2010	6-8	1410	DUPLICATE				
SB-307	CRA	SO-56395-CB-011410-050	1/14/2010	8-10	1415	71	1		in the second	
VA-1	CRA	S0-56394-CB-011310-1010	1/13/2010	0-2	1315	725	1			
VA-1	CRA	S0-56394-CB-011310-1011	1/13/2010	8-10	1325		1			1
VA-1	SulTRAC	S-S0-56394-CB-011310-1011	1/13/2010	8-10	1325			1	25722	
SB-110	CRA	SO-56394-CB-011810-053	1/18/2010	0-1	1000		1			
SB-110	CRA	SO-56394-CB-011810-054	1/18/2010		1005		1			12 12 14 A Lab
SB-110	CRA	SO-56394-CB-011810-055	1/18/2010	8-10	1010	Duplicate				
SB-108	CRA	SO-56394-CB-011810-056	1/18/2010	0-1	1115	A LONG	1	2 11		E PA
SB-108	CRA	SO-56394-CB-011810-057	1/18/2010	6.5-8.5	1120		1			
SB-108	CRA	SO-56394-CB-011810-058	1/18/2010	8.5-10.0	1125		1			
SB-108	SulTRAC	S-SO-56934-CB-011810-057	1/18/2010	6.5-8.5	1125			1		
SB-107	CRA	SO-56394-CB-011810-059	1/18/2010	0-1	1300		1			STAN T
SB-107	CRA	SO-56394-CB-011810-060	1/18/2010	6.5-8.5	1305		1	Self-		
SB-107	CRA	SO-56394-CB-011810-061	1/18/2010	8.5-10.0	1310		1		-T-	201
SB-101	CRA	SO-56394-CB-011810-062	1/18/2010	0-1	1345	MS/MSD	1			
SB-101	CRA	SO-56394-CB-011810-063	1/18/2010	6.8-8.8	1350		1	9 12 1		7 7 7 7
SB-101	CRA	SO-56394-CB-011810-064	1/18/2010	8.8-9.5	1355		1	the state of the s		Paul No.
SB-101	SulTRAC	S-SO-56394-CB-011810-062	1/18/2010	0-1	1345			1		
SB-106	CRA	SO-56394-CB-011810-067	1/18/2010	0-1	1505		1			1000
SB-106	CRA	SO-56394-CB-011810-068	1/18/2010	3.5-5.5	1510		1			
SB-106	CRA	SO-56394-CB-011810-069	1/18/2010	8-10	1515		1	Fig. 72 15	1 121	
SB-106	CRA	SO-56394-CB-011810-070	1/18/2010	8-10	1520	Duplicate				
SB-111	CRA	SO-56394-CB-011810-071	1/18/2010	0-1	1605		1			
SB-111	CRA	SO-56394-CB-011810-072	1/18/2010	7-9	1605	Land Bridge	1			83.12
SB-111	SulTRAC	S-SO-56394-CB-011810-071	1/18/2010	0-1	1605			1		
SB-308	CRA	SO-56394-DR-011810-1020	1/18/2010	0-2	1410	The second	1			100
SB-308	CRA	SO-56394-DR-011810-1021	1/18/2010	3-5	1415		1	N 16-1		
SB-308	CRA	SO-56394-DR-011810-1022	1/18/2010	7.5-9.5	1420		1			
Test Pit 201	CRA	SO-56394-DR-011910-1023	1/19/2010	0-2	1105	THE SHALL	1	100	F - 100	

			SUBSURF	ACE SOIL SAMPLI	ES continued					
SAMPLE LOCATION	I SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD coun
Test Pit 201	CRA	SO-56394-DR-011910-1024	1/19/2010	8-10	1130		1			
Test Pit 201	SulTRAC	S-SO-56394-DR-011910-1024	1/19/2010	8-10	1130			1		
Test Pit 202	CRA	SO-56394-DR-011910-1025	1/19/2010	1-2	1330		1			-
Test Pit 202	CRA	SO-56394-DR-011910-1026	1/19/2010	1-2	1335	Duplicate			1 / 17	
Test Pit 202	CRA	SO-56394-DR-011910-1027	1/19/2010	8-10	1340		1			
SB-113	CRA	SO-56394-CB-011910-073	1/19/2010	0-1	905		1			
SB-113	CRA	SO-56394-CB-011910-074	1/19/2010	8-10	910		1			
SB-112	CRA	SO-56394-CB-011910-075	1/19/2010	0-1	950		1			
SB-112	CRA	SO-56394-CB-011910-076	1/19/2010	0-1	950	Duplicate				
SB-112	CRA	SO-56394-CB-011910-077	1/19/2010	6-8	950		1			
SB-112	SulTRAC	S-SO-56394-CB-011910-077	1/19/2010	6-8	950			1		
SB-112	SulTRAC	SD-SO-56394-CB-011910-077	1/19/2010	6-8	950	Duplicate			1	
SB-114	CRA	SO-56394-CB-011910-078	1/19/2010	0-1	1110		1			
SB-114	CRA	SO-56394-CB-011910-079	1/19/2010	8-10	1115		1			
SB-116	CRA	SO-56394-CB-011910-080	1/19/2010	0-1	1250		1			
SB-116	CRA	SO-56394-CB-011910-081	1/19/2010	7-9	1255		1			1
SB-116	SulTRAC	S-SO-56394-CB-011910-081	1/19/2010	7-9	1255		S. S. D. S. E.	1		
SB-116	CRA	SO-56394-CB-011910-082	1/19/2010	9.5-10	1300		1			
SB-117	CRA	SO-56394-CB-011910-083	1/19/2010	0-1	1410	MS/MSD	1			
SB-117	CRA	SO-56394-CB-011910-084	1/19/2010	8-10	1415		1			
SB-115	CRA	SO-56394-CB-011910-085	1/19/2010	0-1	1520		1			
SB-115	CRA	SO-56394-CB-011910-086	1/19/2010	3-5	1525		1			
SB-115	SulTRAC	S-SO-56394-CB-011910-086	1/19/2010	3-5	1525			1		
SB-115	CRA	SO-56394-CB-011910-087	1/19/2010	5-7	1530	1	1			
SB-115	CRA	SO-56394-CB-011910-088	1/19/2010	9-10	1535		1			
SB-119	CRA	SO-56394-CB-011910-089	1/19/2010	0-1	1620		1			
SB-119	CRA	SO-56394-CB-011910-090	1/19/2010	8-10	1625		1			Anail Land
SB-119	SulTRAC	S-SO-56394-CB-011910-090	1/19/2010	8-10	1625			1		
Test Pit 203	CRA	SO-56394-DR-012010-1031	1/20/2010	0.5-1.5	845		1			
Test Pit 203	SulTRAC	S-SO-56394-DR-012010-1031	1/20/2010	0.5-1.5	845			1		
Test Pit 203	CRA	SO-56394-DR-012010-1032	1/20/2010	2-4	900		1	7 10		1 1
Test Pit 203	CRA	SO-56394-DR-012010-1033	1/20/2010	8-10	925		1			
Test Pit 301	CRA	SO-56394-DR-012010-1034	1/20/2010	0-1	1135		1			
Test Pit 301	CRA	SO-56394-DR-012010-1035	1/20/2010	6-8	1210		1			
Test Pit 301	SulTRAC	S-SO-56394-DR-012010-1035	1/20/2010	6-8	1210		18/18/19	1		
Test Pit 301	CRA	SO-56394-DR-012010-1036	1/20/2010	8-10	1225		1			
Test Pit 302	CRA	SO-56394-DR-012010-1037	1/20/2010	0.5-1.5	1345		1			
Test Pit 302	CRA	SO-56394-DR-012010-1038	1/20/2010	4-6	1400	Lat Planet	1	Carrie Land		
Test Pit 302	SulTRAC	S-SO-56394-DR-012010-1038	1/20/2010	4-6	1400			1		

SUBSURFACE SOIL SAMPLES continued										
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD cou
est Pit 302	CRA	SO-56394-DR-012010-1039	1/20/2010	10-11	1425		1			
est Pit 306	CRA	SO-56394-DR-012010-1041	1/20/2010		1515		1			
est Pit 306	CRA	SO-56394-DR-012010-1042	1/20/2010	6-7	1535		1	0 110		
est Pit 306	CRA	SO-56394-DR-012010-1043	1/20/2010		1540	Duplicate			13775	ET IN SE
B-144	CRA	SO-56394-CB-012010-092	1/20/2010	0-1	1000		1			No.
B-144	CRA	SO-56394-CB-012010-093	1/20/2010		1005		1		-	1 mg
B-144	CRA	SO-56394-CB-012010-093	1/20/2010		1005	Duplicate	E-3776 163	E-14 - 18.3		
B-145	CRA	SO-56394-CB-012010-094	1/20/2010		1100		1			100000
B-145	CRA	SO-56394-CB-012010-095	1/20/2010	7.5-9.5	1105	The Audit Control	1			
B-145	SulTRAC	S-SO-56394-CB-012010-094	1/20/2010	0-1	1100			1		
B-143	CRA	SO-56394-CB-012010-096	1/20/2010		1200		1			
B-143	CRA	SO-56394-CB-012010-097	1/20/2010		1205		1		- N - N	
SB-142	CRA	SO-56394-CB-012010-098	1/20/2010		1355		1			
B-142	CRA	SO-56394-CB-012010-099	1/20/2010		1400		1	- A - W		THE RESIDENCE OF
B-142	SulTRAC	S-SO-56394-CB-012010-099	1/20/2010		1350			1		A DANIEL BELLA
B-102	CRA	SO-56394-CB-012010-100	1/20/2010	0-1	1430		1			
B-102	CRA	SO-56394-CB-012010-101	1/20/2010	8-10	1435	- 70 0	1	7 7 7	The state of	
B-118	CRA	SO-56394-CB-012010-102	1/20/2010	0-1	1545		1		3740	- to the second
B-118	CRA	SO-56394-CB-012010-103	1/20/2010	7.5-9.5	1550	47 N D N	1			THE RESERVE
B-103	CRA	SO-56394-CB-012010-104	1/20/2010	0-1	1640		1	Ker 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 5 5 5	
SB-103	CRA	SO-56394-CB-012010-105	1/20/2010	7-9	1645	The Market of the	1	- 8m (14)	100	A A
B-103	SulTRAC	S-SO-56394-CB-012010-105	1/20/2010	7-9	1645			1		
Test Pit 303	CRA	SO-56394-DR-012110-1044	1/21/2010	0-1	835		1			
est Pit 303	CRA	SO-56394-DR-012110-1045	1/21/2010	6-8	855		1	11 19 19 15	10 200	La constitue
est Pit 303	SulTRAC	S-SO-56394-DR-012110-1045	1/21/2010	6-8	855			1		
est Pit 307	CRA	SO-56394-DR-012110-1046	1/21/2010	0.5-1.5	1020		1			
est Pit 307	CRA	SO-56394-DR-012110-1047	1/21/2010	0.5-1.5	1025	Duplicate	ATTENDED	E - C 1		
est Pit 307	CRA	SO-56394-DR-012110-1048	1/21/2010	8-10	1045		1			
est Pit 307	CRA	SO-56394-DR-012110-1049	1/21/2010	2-3	1120		1			
est Pit 307	SulTRAC	S-SO-56394-DR-012110-1049	1/21/2010	2-3	1120			1		
Test Pit 307	SulTRAC	SD-SO-56394-DR-012110-1049	1/21/2010	2-3	1125	Duplicate				1
est Pit 305	CRA	SO-56394-DR-012110-1050	1/21/2010	0.5-1.5	1340		1			
Test Pit 305	SulTRAC	S-SO-56394-DR-012110-1050	1/21/2010	0.5-1.5	1340			1		
est Pit 305	CRA	SO-56394-DR-012110-1051	1/21/2010	and the same of th	1350	MS/MSD	1			
Test Pit 305	CRA	SO-56394-DR-012110-1052	1/21/2010		1405		1		Santa Pa	
Test Pit 304	CRA	SO-56394-DR-012110-1053	1/21/2010	0.5-1.5	1455		1			
Test Pit 304	CRA	SO-56394-DR-012110-1054	1/21/2010	2-4	1505	Water State of the	1	C - 78		17. 200
Test Pit 304	CRA	SO-56394-DR-012110-1055	1/21/2010		1515	15 15 15 15 15	1		The second second	W. S. P. P.
SB-120	CRA	SO-56394-CB-012110-106	1/21/2010		905	THE PART OF	1		A PROPERTY OF THE PARTY OF THE	

			SUBSURF	ACE SOIL SAMPLE	S continued		2.7	the same of		5
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample count	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD cou
SB-120	CRA	SO-56394-CB-012110-107	1/21/2010	7.75-9.75	910		1			The last
SB-120	CRA	SO-56394-CB-012010-108	1/21/2010	0-1	915	Duplicate		2 3 3 3		5
SB-120	SulTRAC	S-SO-56394-CB-012110-107	1/21/2010	7.75-9.75	900			1		
SB-104	CRA	SO-56394-CB-012110-109	1/21/2010	0-1	950		1			A TOTAL
SB-104	CRA	SO-56394-CB-012110-110	1/21/2010	3-5	955	MS/MSD	1			
SB-104	CRA	SO-56394-CB-012110-111	1/21/2010	5-7	1000		1			
SB-104	CRA	SO-56394-CB-012110-112	1/21/2010	8-10	1005		1			1 2
SB-104	SulTRAC	S-SO-56394-CB-012110-109	1/21/2010	0-1	1000			1		
SB-122	CRA	SO-56394-CB-012110-113	1/21/2010	0-1	1120		1			Net Little
SB-122	CRA	SO-56394-CB-012110-114	1/21/2010	8-10	1125		1	Part I		
SB-122	SulTRAC	S-SO-56394-CB-012110-114	1/21/2010	8-10	1120			1		
SB-124	CRA	SO-56394-CB-012110-115	1/21/2010	0-1	1315		1	Par Suga		
SB-124	CRA	SO-56394-CB-012110-116	1/21/2010	8-10	1320		1	8 1 1		
SB-124	SulTRAC	S-SO-56394-CB-012110-116	1/21/2010	8-10	1310			1		
B-126	CRA	SO-56394-CB-012110-117	1/21/2010	0-1	1415	To see the second	1			
SB-126	CRA	SO-56394-CB-012110-118	1/21/2010	7.5-9.5	1420		1	100000	11 1.54	
B-126	SulTRAC	S-SO-56394-CB-012110-118	1/21/2010	7.5-9.5	1410			1		
SB-105	CRA	SO-56394-CB-012110-119	1/21/2010	0-1	1520		1			
SB-105	CRA	SO-56394-CB-012110-120	1/21/2010	1-3	1525		1			
SB-105	CRA	SO-56394-CB-012110-121	1/21/2010	3-5	1530		1			
SB-105	CRA	SO-56394-CB-012110-122	1/21/2010	8-10	1535		1			
SB-128	CRA	SO-56394-CB-012110-123	1/21/2010	3-5	1540	Duplicate				
SB-128	CRA	SO-56394-CB-012110-124	1/21/2010	0-1	1615		1			
SB-128	CRA	SO-56394-CB-012110-125	1/21/2010	11.5-13.5	1620		1			
SB-130	CRA	S0-56394-CB-012510-126	1/25/2010	0-1	0915		1			-
SB-130	CRA	S0-56394-CB-012510-127	1/25/2010	12.5-14.5	0925		1			
B-130	CRA	S0-56394-CB-012510-128	1/25/2010	12.5-14.5	0930	Duplicate				
B-126	CRA	S0-56394-CB-012510-129	1/25/2010	7.5-9.5	0955	RESAMPLE	1			
B-126	SulTRAC	S-S0-56394-CB-012510-129	1/25/2010	7.5-9.5	0955			1		
B-131	CRA	S0-56394-CB-012510-130	1/25/2010	0-1	1040		1	[ T ] (T ] (T )		
SB-131	CRA	S0-56394-CB-012510-131	1/25/2010	6-8	1045	MS/MSD	1			
SB-129	CRA	S0-56394-CB-012510-132	1/25/2010	0-1	1120	100	1			
SB-129	CRA	S0-56394-CB-012510-133	1/25/2010	6-8	1125		1			
SB-129	CRA	S0-56394-CB-012510-134	1/25/2010	8-10	1130		1			
B-129	SulTRAC	S-S0-56394-CB-012510-133	1/25/2010	Contract Con	1125			1		
B-127	CRA	S0-56394-CB-012510-135	1/25/2010	0-1	1245		1	7		
B-127	CRA	S0-56394-CB-012510-136	1/25/2010		1250		1		4177	
B-127	CRA	S0-56394-CB-012510-137	1/25/2010		1255		1	Market No.	. T	
B-127	SulTRAC	S-S0-56394-CB-012510-137	1/25/2010		1255			1	4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	

	SUBSURFACE SOIL SAMPLES continued									
SAMPLE LOCATION	I SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD cour
SB-125	CRA	S0-56394-CB-012510-138	1/25/2010	0-1	1335	7.632	1	V-1-3-2		
SB-125	CRA	S0-56394-CB-012510-139	1/25/2010		1340		1			
SB-125	CRA	S0-56394-CB-012510-140	1/25/2010	3-5	145	Duplicate			11.538	
SB-125	CRA	S0-56394-CB-012510-141	1/25/2010	9.5-10	1350		1	- 51 N - 1		1
B-123	CRA	S0-56394-CB-012510-142	1/25/2010		1500		1	777777	W. V. T.	
SB-123	CRA	S0-56394-CB-012510-143	1/25/2010		1505		1	THE SECOND	12 / av 19	
SB-123	SulTRAC	S-S0-56394-CB-012510-143	1/25/2010		1505		TANK DESIGNATION	1		
B-121	CRA	S0-56394-CB-012510-144	1/25/2010		1550		1	950 15		
B-121	CRA	S0-56394-CB-012510-145	1/25/2010	1-3	1555		1	2 TV-1 19		E. Mil
B-121	CRA	S0-56394-CB-012510-146	1/25/2010	11-13	1600		1			
B-121	SulTRAC	S-S0-56394-CB-012510-144	1/25/2010	0-1	1550			1		
SB-132	CRA	S0-56394-CB-012510-147	1/25/2010	0-1	1635	77	1	7		
SB-132	CRA	S0-56394-CB-012510-148	1/25/2010	8-10	1640		1			1 16177
TP-308	CRA	S0-56394-DR-012510-1057	1/25/2010	0-1.25	0915		1			
P-308	CRA	S0-56394-DR-012510-1058	1/25/2010	1-2	920		1		St. Lill	
P-308	CRA	S0-56394-DR-012510-1059	1/25/2010	4-6	925		1			- Sign - Mark
TP-308	SulTRAC	S-S0-56394-DR-012510-1059	1/25/2010	4-6	925		Section 1	1		
TP-315	CRA	S0-56394-DR-012510-1060	1/25/2010	0-1	1015		1			
P-315	CRA	S0-56394-DR-012510-1061	1/25/2010	4-6	1025		1			
P-309	CRA	S0-56394-DR-012510-1062	1/25/2010	0-1	1115		1			
TP-309	CRA	S0-56394-DR-012510-1063	1/25/2010	3-4	1125		1			The same
rp-309	SulTRAC	S-S0-56394-DR-012510-1063	1/25/2010	3-4	1125			1		
ГР-309	CRA	S0-56394-DR-012510-1064	1/25/2010	6-8	1145	MS/MSD	1			
TP-314	CRA	S0-56394-DR-012510-1065	1/25/2010	0-2	1310		1			
P-314	CRA	S0-56394-DR-012510-1066	1/25/2010	6-8	1320		1			14
TP-314	CRA	S0-56394-DR-012510-1067	1/25/2010	10-11	1330	Colored Section	1		e Harri	
TP-312	CRA	S0-56394-DR-012510-1069	1/25/2010	0-2	1440		1		Land Control	
P-312	SulTRAC	S-S0-56394-DR-012510-1069	1/25/2010	0-2	1440			1		
P-312	CRA	S0-56394-DR-012510-1070	1/25/2010	5-7	1500		1			
TP-312	CRA	S0-56394-DR-012510-1071	1/25/2010	5-7	1500	Duplicate				The Party
SB-133	CRA	SO-56394-CB-102610-150	1/26/2010	0-1	0900	MS/MSD	1			
SB-133	CRA	SO-56394-CB-102610-149	1/26/2010	7-9	0905		1			
SB-133	CRA	SO-56394-CB-102610-151	1/26/2010	7-9	0910	Duplicate				
SB-137	CRA	SO-56394-CB-102610-152	1/26/2010	0-1	1015	Mary San -	1			
SB-137	CRA	SO-56394-CB-102610-153	1/26/2010	8-10	1020		1			
SB-137	SulTRAC	S-SO-56394-CB-102610-153	1/26/2010	8-10	1020			1		
SB-135	CRA	SO-56394-CB-102610-154	1/26/2010	0-1	1105		1			
SB-135	CRA	SO-56394-CB-102610-155	1/26/2010	8-10	1110		1			
SB-136	CRA	SO-56394-CB-102610-156	1/26/2010	0-1	1240	The state of the s	1	CAN BUT	1 - 1 To 12 - 15	100

			SUBSURF	ACE SOIL SAMPLE	S continued			41 6		Mark and a second
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample count	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD coun
SB-136	CRA	SO-56394-CB-102610-157	1/26/2010	0-1	1245	Duplicate				
SB-136	CRA	SO-56394-CB-102610-158	1/26/2010	8-10	1250		1		Tale to year.	
SB-136	SulTRAC	S-SO-56394-CB-102610-158	1/26/2010	8-10	1250			1		
SB-134	CRA	SO-56394-CB-102610-159	1/26/2010	0-1	1340		1	19.11		
SB-134	CRA	SO-56394-CB-102610-160	1/26/2010	1.5-3.5	1345		1		, 10 A J 12	
SB-134	SulTRAC	S-SO-56394-CB-102610-160	1/26/2010	1.5-3.5	1345			1		
SB-140	CRA	SO-56394-CB-102610-161	1/26/2010	0-1	1430		1			
SB-140	CRA	SO-56394-CB-102610-162	1/26/2010	8-10	1435		1			
SB-140	CRA	SO-56394-CB-102610-163	1/26/2010	8-10	1440	Duplicate		1 A 1		
SB-138	CRA	SO-56394-CB-102610-164	1/26/2010	0-1	1515		1			
SB-138	CRA	SO-56394-CB-102610-165	1/26/2010	8-10	1520		1	-		
SB-138	SulTRAC	S-SO-56394-CB-102610-165	1/26/2010	8-10	1520			1		
SB-141	CRA	SO-56394-CB-102610-166	1/26/2010	0-1	1610		1			
SB-141	CRA	SO-56394-CB-102610-167	1/26/2010	9-11	1615		1			
SB-141	SulTRAC	S-SO-56394-CB-102610-166	1/26/2010	0-1	1610			1		
TP-313	CRA	S0-56394-DR-012510-1072	1/26/2010	2-4	900		1	-		
TP-313	CRA	S0-56394-DR-012510-1073	1/26/2010	4-6	910		1			
TP-313	CRA	S0-56394-DR-012510-1074	1/26/2010	4-6	910	Duplicate				
TP-313	CRA	S0-56394-DR-012510-1075	1/26/2010	8-9	925		1			
TP-313	SulTRAC	S-S0-56394-DR-012510-1075	1/26/2010	8-9	925			1		
TP-311	CRA	S0-56394-DR-012510-1076	1/26/2010	0-2	1030		. 1			
TP-311	CRA	S0-56394-DR-012510-1077	1/26/2010	4-6	1045		1			
TP-310	CRA	S0-56394-DR-012510-1078	1/26/2010	1-2	1135		1			
TP-310	SulTRAC	S-S0-56394-DR-012510-1078	1/26/2010	1-2	1135			1		
TP-310	SulTRAC	SD-S0-56394-DR-012510-1078	1/26/2010	1-2	1135	Duplicate			1	
TP-310	CRA	S0-56394-DR-012510-1079	1/26/2010	8-10	1155		1			
SB-139	CRA	SO-56394-CB-012710-168	1/27/2010	0-1	900		1			
SB-139	CRA	SO-56394-CB-012710-169	1/27/2010	6-8	905		1			
SB-139	SulTRAC	S-SO-56394-CB-012710-168	1/27/2010	0-1	900			1		
SB-139	SulTRAC	SD-SO-56394-CB-012710-168	1/27/2010	0-1	900	Duplicate			1	
SB-321	CRA	SO-56394-CB-012710-170	1/27/2010	0-1	1000		1			
SB-321	CRA	SO-56394-CB-012710-171	1/27/2010	0-1	1005	Duplicate				
SB-321	CRA	SO-56394-CB-012710-172	1/27/2010	7-9	1010		1			
SB-301	CRA	SO-56394-CB-012710-173	1/27/2010	0-1	1050		1			
SB-301	CRA	SO-56394-CB-012710-174	1/27/2010	5.5-7.5	1055		1			
SB-301	CRA	SO-56394-CB-012710-175	1/27/2010	5.5-7.5	1100	Duplicate				
SB-302	CRA	SO-56394-CB-012710-176	1/27/2010	0-1	1120	MS/MSD	1			
SB-302	CRA	SO-56394-CB-012710-177	1/27/2010	6.75-8.75	1135		1			
SB-302	CRA	SO-56394-CB-012710-178	1/27/2010	8.75-9.75	1140		1			

			SUBSURF	ACE SOIL SAMPLE	S continued		A ALEXANDER			
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample count	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD count
SB-302	SulTRAC	S-SO-56394-CB-012710-177	1/27/2010	6.75-8.75	1135			1		
SB-202	CRA	SO-56394-CB-012710-179	1/27/2010	0-1	1345	MS/MSD	1			
SB-202	CRA	SO-56394-CB-012710-180	1/27/2010	2-4	1350		1	100000000000000000000000000000000000000		
SB-202	SulTRAC	S-SO-56394-CB-012710-180	1/27/2010	2-4	1350			1		
SB-201	CRA	SO-56394-CB-012710-181	1/27/2010	0-1	1445		1			THE PERSON
SB-201	CRA	SO-56394-CB-012710-182	1/27/2010	2-4	1450		1			
SB-201	SulTRAC	S-SO-56394-CB-012710-182	1/27/2010	2-4	1450			1		
SB-204	CRA	SO-56394-CB-012710-183	1/27/2010	0-1	1520		1	THE PERSON	W. Zin	-1, -1
SB-204	CRA	SO-56394-CB-012710-184	1/27/2010	2-4	1540		1			A CONTRACTOR
SB-204	SulTRAC	S-SO-56394-CB-012710-183	1/27/2010	0 0-1	1520	MS/MSD		1		1
SB-203	CRA	SO-56394-CB-012710-185	1/27/2010		1550		1			
SB-203	CRA	SO-56394-CB-012710-186	1/27/2010	2.5-4.5	1555	- 7 T - 0	1			
SB-203	CRA	SO-56394-CB-012710-187	1/27/2010	2.5-4.5	1600	Duplicate	2751	24.2	172	
SB-311	CRA	SO-56394-CB-012810-188	1/28/2010	0-1	910		1	The same of		
SB-311	CRA	SO-56394-CB-012810-189	1/28/2010	13-15	915		1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SB-311	SulTRAC	S-SO-56394-CB-012810-189	1/28/2010	13-15	915			1		
SB-311	SulTRAC	SD-SO-56394-CB-012810-189	1/28/2010	13-15	915	Duplicate				
SB-309	CRA	SO-56394-CB-012810-190	1/28/2010	0-1	1005		1	W. 17 (5-12-2)		
SB-309	CRA	SO-56394-CB-012810-191	1/28/2010	0-1	1010	Duplicate	177		211111111111111111111111111111111111111	
SB-309	CRA	SO-56394-CB-012810-192	1/28/2010	12.5-14.5	1000		1			1
SB-309	SulTRAC	S-SO-56394-CB-012810-190	1/28/2010	0-1	1005			1		
SB-310	CRA	SO-56394-CB-012810-193	1/28/2010	0 0-1	1030		1			N. Santage
SB-310	CRA	SO-56394-CB-012810-194	1/28/2010	12-14	1045	MS/MSD	1			
SB-312	CRA	SO-56394-CB-012810-195	1/28/2010	0-1	1135		1			
Totals							209	53	(	3

	a service to the serv	VA	S AND MONITO	RING WELL GROU	INDWATER SA	AMPLES			S. ITDA S	100000000000000000000000000000000000000
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD cour
VA-1	CRA	VAS-56394-DR-011110-1001	1/11/2010	10-14	1600		1			
VA-1	SulTRAC	S-VAS-56394-DR-011110-1001	1/11/2010	10-14	1600			1		
VA-1	CRA	VAS-56394-DR-011210-1002	1/12/2010		945		1			
VA-1	CRA	VAS-56394-DR-011210-1003	1/12/2010	18-22	1055		1	-1		
VA-1	CRA	VAS-56394-DR-011210-1004	1/12/2010	18-22	1055	Duplicate				
VA-1	CRA	VAS-56394-DR-011210-1005	1/12/2010	22-26	1345		1			
VA-1	CRA	VAS-56394-DR-011210-1006	1/12/2010	26-30	1530		1			
VA-1	CRA	VAS-56394-DR-011310-1007	1/13/2010	30-34	840		1	-		
VA-1	CRA	VAS-56394-DR-011310-1008	1/13/2010	34-38	1010		1		1 1	
VA-1	SulTRAC	S-VAS-56394-DR-011310-1008	1/13/2010		1010			1		
VA-1	SulTRAC	SD-VAS-56394-DR-011310-1008	1/13/2010	34-38	1010	Duplicate			1	
VA-1	CRA	VAS-56394-DR-011310-1009	1/13/2010	38-42	1145		1			
VA-2	CRA	VAS-56394-DR-011310-1012	1/13/2010	6-10	1635		1			
VA-2	CRA	VAS-56394-DR-011410-1013	1/14/2010	10-14	845		1			
VA-2	SulTRAC	S-VAS-56394-DR-011410-1014	1/14/2010	10-14	845			1		
VA-2	CRA	VAS-56394-DR-011410-1014	1/14/2010	14-18	1040		1			
VA-2	CRA	VAS-56394-DR-011410-1015	1/14/2010	14-18	1040	Duplicate				
VA-2	CRA	VAS-56394-DR-011410-1016	1/14/2010	18-22	1250		1			
VA-2	CRA	VAS-56394-DR-011410-1017	1/14/2010	22-26	1400		1			
VA-2	CRA	VAS-56394-DR-011810-1018	1/18/2010	26-30	955		1			
VA-2	SulTRAC	VAS-56394-DR-011810-1018	1/18/2010	26-30	955			1		
VA-2	CRA	VAS-56394-DR-011810-1019	1/18/2010	30-32	1135		1			
MW-12	CRA	GW-56394-CB-020110-197	2/1/2010		1020		1			
MW-12	CRA	GW-56394-CB-020110-198	2/1/2010		1045	DUPLICATE				
MW-13	CRA	GW-56394-CB-020110-199	2/1/2010		1050		1			
MW-13	SulTRAC	S-GW-56394-CB-020110-199	2/1/2010		1050			1		
MW-14	CRA	GW-56394-CB-020110-200	2/1/2010		1250	MS/MSD	1			
MW-11	CRA	GW-56394-CB-020110-201	2/1/2010		1505		1			
MW-11	SulTRAC	S-GW-56394-CB-020110-201	2/1/2010		1505			1		
MW-3	CRA	GW-56394-CB-020210-203	2/2/2010		840	ha i I i	1	7 - 2		
MW-3	CRA	GW-56394-CB-020210-204	2/2/2010		910	DUPLICATE				
MW-4	CRA	GW-56394-CB-020210-205	2/2/2010		920		1			
MW-4	SulTRAC	S-GW-56394-CB-020210-205	2/2/2010		920			1		
MW-4	SulTRAC	SD-GW-56394-CB-020210-205	2/2/2010		950	DUPLICATE			1	7.0
MW-5	CRA	GW-56394-CB-020210-206	2/2/2010		1135	in a	1			-
MW-10	CRA	GW-56394-CB-020210-207	2/2/2010		1325		1			-
MW-9	CRA	GW-56394-CB-020210-208	2/2/2010		1525		1			
MW-18	CRA	GW-56394-CB-020310-210	2/3/2010		840		1		Listin .	All of the con-
MW-18	SulTRAC	S-GW-56394-CB-020310-210	2/3/2010		840	MS/MSD		1		

SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample count	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD count
MW-6	CRA	GW-56394-CB-020310-211	2/3/2010		910		1			
MW-6	CRA	GW-56394-CB-020310-212	2/3/2010		940	DUPLICATE				
MW-7	CRA	GW-56394-CB-020310-213	2/3/2010		1130		1			
MW-19	CRA	GW-56394-CB-020310-214	2/3/2010		1315	The second	1			
MW-2	CRA	GW-56394-CB-020310-215	2/3/2010		1515		1			100
MW-16	CRA	GW-56394-CB-020410-217	2/4/2010		845		1			5
MW-16	SulTRAC	S-GW-56394-CB-020410-217	2/4/2010		845			1		
MW-17	CRA	GW-56394-CB-020410-218	2/4/2010		955	MS/MSD	1	E 45 / /		The state of the s
MW-1	CRA	GW-56394-CB-020410-219	2/4/2010		1140		1		7	
MW-8	CRA	GW-56394-CB-020410-220	2/4/2010		1345		1			The second second
MW-15	CRA	GW-56394-CB-020410-221	2/4/2010		1405		1			
Totals							34	9	2	2

			SUR	FACE WATER SAP	MPLES					
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD count
SW-1	EV	SW-56394-EV-011910-1028	1/19/2010			ALL LAND	1	57 1 4 1 1		
SW-2	EV	SW-56394-EV-011910-1029	1/19/2010	\$27 E T		66076283	1			The same of the same of
Totals							2			GERMAN
State for the			SU	RFACE SOIL SAM	PLES					
SAMPLE LOCATION	SAMPLER	SAMPLE ID	DATE	INTERVAL, FT	SAMPLE TIME	Field Duplicates or MS/MSD	CRA sample count	SulTRAC sample count	SulTRAC Duplicate Count	SulTRAC MS/MSD count
SS-105	CRA	SS-56394-EV-011210-011	1/12/2010	0-1			1	(E)   100		100
SS-103	CRA	SS-56394-EV-011210-012	1/12/2010	0-1	1320		1			
SS-103	SulTRAC	S-SS-56394-EV-011210-012	1/12/2010	0-1	1320			1		
SS-102	CRA	SS-56394-EV-011210-013	1/12/2010	0-1	1345		1			
SS-100	CRA	SS-56394-EV-011210-010	1/12/2010	0-1	1415		1			
SS-107	CRA	SS-56394-EV-011210-015	1/12/2010	0-1	1120		1			
SS-101	CRA	SS-56394-EV-011310-021	1/13/2010	0-1	1135		1			
SS-101	SulTRAC	S-SS-56394-EV-011310-021	1/13/2010	0-1	1135			1		
SS-104	CRA	SS-56394-EV-011310-022	1/13/2010	0-1	1325		1			
SS-106	CRA	SS-56394-EV-011310-023	1/13/2010	0-1	1345		1			
SS-106	CRA	SS-56394-EV-011310-024	1/13/2010	0-1	1350	Duplicate				
Total				11000			8	2	C	

## **ATTACHMENT 1**

## **CRA SAMPLE LOCATION FIGURES**

(Four Sheets)







